

Assessment of Corrective Measures (ACM):

If one or more Table 3.1 constituents are detected at statistically significant levels above the established groundwater protection standard (GPS), the facility can submit an Assessment of Corrective Measures (ACM) Report (9VAC20-81-260.C.1.c). While a facility may choose to submit an ACM, in lieu of PPR, when the contamination has not migrated beyond facility boundary, an ACM must be submitted when the contamination has migrated beyond facility boundary.

Prior to submitting the ACM report the facility must have details pertaining to the nature and extent (NES) of the release, as required by 9VAC20-81-260.C1.a. The function of this nature-and-extent evaluation is to obtain sufficient site-specific data to delineate the plume. The NES report does not require a risk assessment.

Per 9VAC20-81-260. C. 3.a.(1), potential impacts of appropriate potential remedies need to be evaluated for cross-media impacts and control of exposure to any residual contamination.

Quantitative risk assessment is not always required for ACM. Quantitative risk assessment may not be required as part of ACM if the plume is contained within the facility boundary and the corrective measures considered are not expected to expose the population to contaminants (e.g., MNA, in-situ remedies).

Quantitative risk assessment will be required if the plume has migrated beyond the facility boundary. Also, quantitative risk assessment will be required if the corrective measure(s) being considered is expected to result in release of contaminants (short-term or long-term) into the environmental media and/or result in human exposure (e.g., pump-and-treat, air sparging, SVE, etc.). The quantitative risk assessment must include all the detected constituents (above site-specific background) and J-flagged data even though remediation considerations may be limited to those which exceed GPS.

For facilities that have permanent structures on-site and/or if the contamination has migrated beyond the facility boundary and a potential for vapor intrusion exists for off-site receptors, the vapor intrusion pathway may also need to be included in the risk assessment in addition to direct exposure to groundwater via ingestion, dermal and inhalation (volatiles). The facility should consult the steps in Risk Assessment (steps [1](#), [2](#), [3](#), and [4](#)) while developing risk assessment documentation.

State Water Law (62.1 44.5) and Water Regulation (9 VAC 25-260-20.A; 9 VAC 25-31-50.A; 9 VAC 25-32-30.B.1.b) prohibit any constituent discharge to State Waters unless such discharge has been authorized by Permit. Therefore the facility should not submit an ecological risk assessment unless specifically requested by DEQ. Please refer to guidance for 'Surface Water Impacts at Solid Waste Landfills' dated February 22, 2008 at <http://townhall.virginia.gov/L/ViewGDoc.cfm?gdid=3643>.